

DOCKET NO.: 125931-00104
Application No.: 10/009,460
Office Action Dated: November 9, 2007

PATENT

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-13. (Canceled)

14. (Previously presented) A thermoplastic composite material consisting of:

a) at least 15% by weight of leather fibers or a mixture of two or more organic fibrous materials wherein said organic fibrous materials consist of leather fibers, hair and silk;

b) at least 15% by weight of a thermoplastic binder; wherein the binder comprises one or more polymers selected from the group consisting of polyurethanes, polyesters, polyamides, polyolefins, polyvinyl esters, polyethers, polystyrenes, styrene/olefin copolymers, polyacrylates, ethylene/vinyl acetate copolymers and copolymers of two or more of the polymers, wherein the binder does not consist solely of two different polyacrylates, and wherein said polyacrylates have a glass transition temperature of less than about -20°C; and

c) up to 20% by weight of one or more ingredients selected from the group consisting of inorganic salts, cationic polymers, preservatives, dyes, natural fats, synthetic fats, paraffins, natural oils, synthetic oils, and silicone oils.

15. (Previously presented) The composite material of claim 14, wherein a) comprises 15% to 45% by weight of the leather fibers or said two or more organic fibrous materials.

16. (Original) The composite material of claim 14, comprising at least 40% by weight of the thermoplastic binder.

17. (Original) The composite material of claim 15, comprising at least 40% by weight of the thermoplastic binder.

DOCKET NO.: 125931-00104
Application No.: 10/009,460
Office Action Dated: November 9, 2007

PATENT

18. (Previously presented) The composite material of claim 14, wherein the thermoplastic binder comprises at least 30% by weight of polyvinyl acetate.

19. (Original) The composite material of claim 14, wherein the thermoplastic binder comprises at least 10% by weight of a copolymer of butadiene and styrene.

20-21. (Canceled).

22. (Previously presented) The composite material of claim 14, wherein a) consists of-leather fibers.

23. (Previously presented) The composite material of claim 14, wherein the leather fibers or organic fibrous material comprises fibers having a stretched length of about 0.1 mm to about 15 mm.

24. (Previously Presented) A process for the production of a thermoplastic composite material, comprising the steps of:

a) combining in any order and mixing ingredients consisting of:

(i) one or more organic fibrous materials comprising fibers having a stretched fiber length of 0.1 mm to 15 mm, wherein the organic fibrous materials are selected from vegetable fibers and animal fibers and a combination thereof,

(ii) one or more polymer dispersions, each dispersion comprising one or more polymers selected from the group consisting of polyurethanes, polyesters, polyamides, polyolefins, polyvinyl esters, polyethers, polystyrenes, styrene/olefin copolymers, polyacrylates, ethylene/vinyl acetate copolymers, and copolymers of two or more of the polymers, wherein the polymers comprising the dispersion or dispersions in combination do not consist solely of two different polyacrylates, and wherein said polyacrylates have a glass transition temperature of less than about -20°C,

DOCKET NO.: 125931-00104
Application No.: 10/009,460
Office Action Dated: November 9, 2007

PATENT

(iii) up to 20% by weight of one or more ingredients selected from the group consisting of inorganic salts, cationic polymers, preservatives, dyes, natural fats, synthetic fats, paraffins, natural oils, synthetic oils, and silicone oils; and

b) treating the resultant mixture with an aqueous solution of an aluminum salt or copper salt or mixture thereof; and

c) dewatering and drying the treated mixture from step b), to form a thermoplastic composite material comprising at least 15% by weight of one or more organic fibrous materials and at least 15% by weight of one or polymers as a thermoplastic binder.

25. (Original) An article of manufacture comprising the thermoplastic composite material of claim 14, laminated with a polymer film on a substrate surface.

26. (Previously presented) A process for surface coating a substrate, comprising the steps of bonding the thermoplastic composite material of claim 14 to a substrate surface with a hotmelt adhesive.

27. (New) The composite material of claim 14, wherein a) comprises 20% to 60% by weight of the leather fibers or said two or more organic fibrous materials.

28. (New) The composite material of claim 14, wherein a) comprises 25% to 45% by weight of the leather fibers or said two or more organic fibrous materials.